To: Gullett, Brian[Gullett.Brian@epa.gov]

Cc: Instrella, Ron (ARC-SG)[Bay Area Environmental Research Institute][ron.instrella@nasa.gov]

From: CHIRAYATH, VED (ARC-SG) **Sent:** Sat 8/6/2016 6:55:15 AM

Subject: Re: Revision of: Draft Quality Assurance Project Plan for your review and comments, Emission

Sampling at Radford

Hi Brian,

I should be available next week after we get back Wednesday.

Best of luck until then!

Best,

Ved Chirayath

Research Scientist

Earth Sciences Division

NASA Ames Laboratory for Advanced Sensing

www.nasa.gov/ames/las

Chair, NASA Ames LGBTQIA Advisory Group

NASA Ames Research Center

Sustainability Base (N-232), Room 267

Office: (650) 604-6278

Cell: (949) 413-8928 ved.chirayath@nasa.gov

On Aug 4, 2016, at 09:280100000GMT-11, Gullett, Brian < Gullett.Brian@epa.gov > wrote:

Folks,

I've attached a revised QAPP which attempts to address ATSDR, Meuer, and Gehring comments.

I would like to get feedback from RFAAP and BAE on the chain of command, titles, roles, any logistical issues in the early section of the QAPP. Will we be able to use hand held communication radios? Will we be able to position remote spotters to coordinate the UAV flight location with the plume? We would like to bring our 20 ft trailer.

I've taken Ms. Meuer's comments on the pan/burn logistics. I'd like to know if it's feasible and DEQ will allow the same mass of material to be spread out to more pans in a day. I'm concerned that a double pan fire will not be an efficient sampling situation for the UAV (for example, if there are two plumes, it's only going to be able to be in one). Since we only have a best engineering judgement of how much to sample to avoid non-detects, I'd like to have the flexibility to figure out on site the most effective sampling mode (highest mass of plume sampled per mass of material burned).

Note that constraints on the payload of the UAV and the requirement for separate sample media (separate UAV flights) to get NC and NG and PCDD/PCDF, all of which

are trace so require large sample volumes, significantly limit the sample numbers.

Please send your comments in by early next week. I'd like to propose a conference call time next Thursday at 1330 h ET. Will this work for everyone?

Thanks!

Brian

Brian K. Gullett, Ph.D.
U.S. Environmental Protection Agency
Office of Research and Development
National Risk Management Research Laboratory
E343-04
Research Triangle Park, NC 27711
gullett.brian@epa.gov
919-541-1534 Ofc
919-699-3074 Cell

From: Gullett, Brian Sent: Wednesday, July 20, 2016 8:37 AM

To: Davie, Robert N. (robert.n.davie4.civ@mail.mil;

Jennings, Ross B CIV (US) (ross.b.jennings.civ@mail.mil;

Jay Stewart (US SSA) (jay.stewart@baesystems.com;

'CHIRAYATH, VED (ARC-SG)' ved.chirayath@nasa.gov>

Cc: Matthew Fladeland (<u>matthew.fladeland@nasa.gov</u>) <<u>matthew.fladeland@nasa.gov</u>>; Aurell, Johanna@epa.gov>

Subject: Draft Quality Assurance Project Plan for your review and comments, Emission Sampling at Radford

Robert, Brad, Jay, Ved,

Please find attached a draft QAPP entitled "Characterization of Air Emissions from Open Burning at Radford Army Ammunition Plant" for your review and comments. After I receive and incorporate your comments satisfactorily, I'll distribute a final copy. This draft should not be cited or distributed outside the U.S. Army/BAE/VA DEQ with the exceptions of, at your discretion, Michelle Gehring and Rear Admiral Rodenbeck (and I'll rely on you to send it to them).

Please let me know if you have any questions. Until August 2, email will be the most reliable means.

My team and I are looking forward to working with you!

Sincerely,

Brian

Brian K. Gullett, Ph.D.
U.S. Environmental Protection Agency
Office of Research and Development
National Risk Management Research Laboratory
E343-04
Research Triangle Park, NC 27711
gullett.brian@epa.gov
919-541-1534 Ofc
919-699-3074 Cell

<QAPP Radford edits BG2 08-04-2016.docx>